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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re PATENT APPLICATION of:

Herbert LIFKA et al.

Group Art Unit: 2879

Serial No.: 09/817,980

Examiner: Anthony T. PERRY

Filed: 27 March 2001

DISPLAY DEVICE AND METHOD
OF MANUFACTURING
SUCH A DISPLAY DEVICE



# APPEAL BRIEF

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Sir:

In response to the "Supplemental" FINAL Office Action dated 26 February 2003, and subsequent Advisory Action dated 29 April 2003, finally rejecting the pending claims 7-26, and in support of the Notice of Appeal filed on 16 May 2003, Applicants hereby submit this Appeal Brief.

## Real Parties in Interest

Koninklijke Philips Electronics N.V. owns all of the rights in the above-identified U.S. patent application by virtual of an assignment recorded at Reel 011864, Frame 0837.

## Related Appeals and Interferences

There are no other appeals or interferences related to this application or to any related application, nor will the disposition of this case affect, or be affected by, any other application directly or indirectly.

## Status of Claims

Claims 1 and 3-19 all stand rejected. Accordingly, the claims on Appeal are claims 1 and 3-19.

## Status of Amendments

According to the Advisory Action mailed on 29 April 2003, the "Amendment Under 37 C.F.R. § 1.116" dated 13 March 2003 has been entered.

## Summary of Invention

The present invention is directed to a display device and a method of manufacturing a display device having a substrate with a conductive pattern thereon.

Accordingly, the invention, as broadly recited in claim 1, comprises a first substrate (2, 23) with a conductor pattern (4, 27), parts of which define pixels, wherein at least within a viewing area (12) of the display device, the conductor pattern (4, 27), viewed transversely to the first substrate (2, 23) along a direction from the conductor pattern (4, 27) toward the first substrate (2, 23), substantially covers the corresponding part of the first substrate (2, 23) (page 4, lines 29-32; page 5, lines 3-4,

14-15; page 6, lines 13-15), and wherein the parts of the conductor pattern (4, 27) are substantially mutually separated by partitioning paths (13) having a minimal path width (page 4, line 32 - page 5, line 1; page 5, lines 15-16).

As broadly recited in claim 3, the invention further features the partitioning paths (13) having a have a substantially constant width (page 2, lines 30-31; page 4, lines 33-34; page 6, lines 2-3).

As broadly recited in claim 4, the invention further features the partitioning paths (13) at least locally having a curved course (page 5, line 34).

As broadly recited in claim 5, the invention further features at least 80% of the partitioning paths (13) having a minimal path width (page 6, lines 30-31).

As broadly recited in claim 6, the invention further features a light-emitting material (8) between two conductor patterns (4, 9), at least one of which, viewed transversely to the first substrate (2), substantially completely covers the corresponding part of the first substrate (2) (page 4, lines 29-32).

As broadly recited in claim 7, the invention further features a second substrate (24) and a layer of electro-optical material (26) between two conductor patterns (27, 28) (page 5, lines 5-8) on the first and second substrates (23, 24), at least one of which conductor patterns, viewed transversely to the corresponding substrate along a direction from the one conductor pattern toward the corresponding substrate, substantially covers the corresponding substrate (page 5, lines 12-13).

As broadly recited in claim 8, the invention further features the conductor pattern (4, 27) being transparent (page 4, line 6).

As broadly recited in claim 9, the invention further features a distance between adjacent parts of the conductor pattern (4, 27) being substantially constant (page 2, lines 30-31; page 4, lines 33-34; page 6, lines 2-3).

As broadly recited in claim 10, the invention comprises first and second substrates (23, 24) separated and confronting each other, a first conductor pattern (27) on a side of the first substrate (23) nearest the second substrate (24), the first conductor pattern (27) defining pixels of the display device, and a second conductor pattern (28) on a side of the second substrate (24) nearest the first substrate (23), wherein, within a viewing area of the device, the first conductor pattern (27) substantially completely covers the first substrate (23) (page 5, lines 12-13), and wherein, within the viewing area of the display device, the second conductor pattern (28) substantially completely covers the second substrate (24) (page 5, lines 14-15).

As broadly recited in claim 11, the invention further features the first conductor pattern (27) comprising a plurality of first electrodes (27) separated from each other by a first partitioning path (13) (page 5, lines 8-14), and the second conductor pattern (28) comprising a plurality of second electrodes (28) separated from each other by a second partitioning path (11) (page 5, lines 14-16).

As broadly recited in claim 12, the invention further features the first and second partitioning paths (13, 11), viewed along a direction perpendicular to the substrate (23, 24), being substantially aligned within the viewing area of the display device (page 5, lines 14-18).

As broadly recited in claim 13, the invention further features each of the first

and second partitioning paths (13, 11) having a minimal path width along at least 80% of a length thereof (page 6, lines 30-31).

As broadly recited in claim 14, the invention further features an electro-optical material (26) disposed between the first and second substrates (23, 24) (page 5, lines 5-8).

As broadly recited in claim 15, the invention comprises a substrate (2); a first conductor pattern (4) disposed on the substrate (2), the first conductor pattern (4) defining pixels of the display device; an electroluminescent material (8) disposed on the first conductor pattern; a second conductor pattern (9) disposed on the electroluminescent material (8), wherein within the viewing area of the display device, the first and second conductor patterns (4, 9), viewed along a direction perpendicular to the substrate (2), each substantially completely cover the substrate (2) (page 4, lines 29-31).

As broadly recited in claim 16, the invention further features the first conductor pattern (4) comprising a plurality of first electrodes (4) separated from each other by a first partitioning path (13), and the first partitioning path (13) having a minimal path width along at least 80% of a length thereof (page 4, lines 29-33; page 6, lines 30-31).

As broadly recited in claim 17, the invention further features the partitioning path (13) being at least partially filled with an insulating material (5) (page 4, lines 10-11 and FIG. 2.).

As broadly recited in claim 18, the invention further features the second

conductor pattern (9) being a plurality of sub-electrodes (9) (page 5, lines 1-2).

As broadly recited in claim 19, the invention further features the plurality of second electrodes (9) being separated from each other by a second partitioning path (11) (page 5, lines 1-2), and the second partitioning path (11) having a minimal path width along at least 80% of a length thereof (page 5, lines 1-2; page 6, lines 31-31).

## Issues

The issues on Appeal are:

(1) whether claims 1 and 3-5 are patentable over Morimoto et al. under 35 U.S.C. § 102;

(2) whether claims 1, 6-11 and 13-14 are patentable over Khan et al. under 35 U.S.C. § 102;

(3) whether claims 15-19 are patentable over Young et al. under 35 U.S.C. § 102; and

(4) whether claim 12 is patentable over Khan et al. in view of Young et al. under 35 U.S.C. § 103.

## Grouping of Claims

Applicants respectfully assert that claims 1 and 3-19 do not all stand or fall together. Specifically, and for the purposes of this Appeal only, Applicants deem claim 1 to stand or fall alone, claims 3-4 to stand or fall together; claim 5 to stand or fall alone; claims 6-8 to stand or fall together; claim 9 to stand or fall alone; claims

10-11 and 13-14 to stand or fall together; claim 12 to stand or fall alone; claims 15, 17 and 18 to stand or fall together; and claims 16 and 19 to stand or fall together.

## Arguments

### Claims 1 and 3-5 Are All Patentable Over Morimoto et al.

The FINAL Office Action dated 26 February 2003 rejected claims 1 and 3-5 under 35 U.S.C. § 102 as allegedly being unpatentable over Morimoto et al. U.S. Patent No. 4,542,317 ("Morimoto").

Applicants respectfully traverse those rejections and submit that claims 1 and 3-5 are patentable over Morimoto for at least the following reasons.

Claim 1

Among other things, in the display device of claim 1, the parts of the conductor pattern are substantially mutually separated by partitioning paths having a minimal path width.

Applicants respectfully submit that no such feature is disclosed by Morimoto.

The specification defines minimal path width as follows:

> "The maximum distance between parts of the conductor pattern is **defined** in that parts of the conductor pattern are mutually separated by partitioning paths having a **minimal path width**. As stated, this distance depends on **process parameters** but particularly on the

tolerances of the photolithographic process used. . . .

Although the words 'minimal path width' are used in this context, it will be evident that this minimal path width will not have a constant value in practice, but may locally vary to some extent due to the influence of, for example, etching rates, dust particles, or other influences."

(Specification at page 2, lines 24-33) (emphasis added); and

"the **minimal path width** between parts of the conductor pattern is introduced on the basis of **process parameters**"

(Specification at page 3, lines 7-8) (emphasis added); and, again

"The conductor paths are designed in such a way that the partitioning paths 13 have a **minimal path width** substantially throughout (**defined by tolerances of the manufacturing process**, such as minimal mask distance, layer thicknesses, etching properties, etc.)."

(Specification at page 4, line 32 - page 5, line 1) (emphasis added); and, yet again

"this information, together with **the minimal path width** of the paths 13 between parts 4 of the conductor pattern (as **defined by process parameters**) is introduced . . ."

(Specification at page 6, lines 11-12).

Therefore, it is respectfully submitted that the Applicants have *repeatedly* indicated in the Specification a specific definition of the claim term "minimal path width" as pertaining to a minimal path width that can be provided by available process parameters, particularly, photolithography tolerances.

The Examiner has never asserted that the term "minimal path width" is in any way vague or indefinite - therefore conceding that the term is capable of precise definition.

However, the Examiner attempted to define "minimal path width" as simply a "very small or slight" path width, in accordance with a conveniently-selected one among many definitions for "minimal" provided by Miriam-Webster's Collegiate dictionary, Tenth Edition.

Applicants respectfully submit that such a definition is not in accordance with the proper rules of claim interpretation under the law, and as expressed by M.P.E.P. § 2111.01, which states that Applicants may provide their own particular definition of a claim term in the specification, as long as the meaning assigned to the term is not repugnant to a term's well known usage (citing In re Hill, 161 F.2d 367, 73 U.S.P.Q. 482 (C.C.P.A. 1947).

Furthermore, the Specification does not support the Examiner-selected definition of "minimal path width," and indeed, a fair reading of the Specification indicates that such a definition is inconsistent with the teachings of the Specification. In this regard, it is noted that Specification specifically states that: "the minimal path width is **usually so small** (as opposed to absolutely being small) that the separation between parts of the conductor pattern is not visible or hardly visible" (col. 2, lines 27-29) (parenthetical comments and emphasis added).

Accordingly, Applicants having provided a clear definition of "minimal path width" in the specification as being defined by available process parameters, and therefore it is respectfully submitted that Examiner's substitution of a conveniently-selected dictionary definition is improper.

Meanwhile, Morimoto does not disclose providing any such minimal path width - as defined by available process parameters - between adjacent parts of the conductor pattern. The Examiner has stated that the path widths in Morimoto are "small." However, Morimoto itself appears to be silent about the spacing between adjacent conductors and, tellingly, - never uses the words "small," "slight," or "minimal" to describe such spacings. Apparently, the Examiner divined that the path widths of Morimoto are small from his own visual interpretation of FIG. 7, not from anything taught or disclosed by Morimoto. So Applicants respectfully submit that even if, *arguendo*, one were to accept the Examiner's chosen definition for "minimal path width," Morimoto does not disclose that its path widths are minimal.

Accordingly, for at least this reason, it is respectfully submitted that the device

of claim 1 is patentable over Morimoto.

Furthermore, the device of claim 1 includes **a conductor pattern, parts of which define pixels**, wherein at least within a viewing area of the display device, the conductor pattern, viewed transversely to the substrate along a direction from the conductor pattern toward the substrate, **substantially covers the corresponding part of the first substrate**.

In the paragraph bridging pages 2 and 3 of the Office Action, the Examiner **picks and chooses various incompatible pieces of two completely different devices** disclosed by Morimoto in an effort to cobble together some semblance of the device of claim 1. For example, the Examiner starts out stating that the conductor pattern comprises elements 12 and 13, which are shown in FIG. 6 of Morimoto. The Examiner needs to include conductive layer 13 because, clearly, in both the embodiments of FIG. 2/6 and FIG. 7, metal film 12 has huge holes therein and could not be said, by itself, to meet the limitation that the conductor pattern "substantially covers" the corresponding part of the first substrate, as required by claim 1. So the Examiner turns to the embodiment of FIGs. 2 and 6 where conductive layer 13 covers up the huge holes in metal later 12 so that, together, perhaps one could say that they "substantially cover" the corresponding part of the first substrate.

However, claim 1 also says that parts of the conductor pattern define pixels.

Here the Examiner turns to the completely separate embodiment of FIG. 7, stating that:

"The **part of the conductive pattern 13 that defines pixels** is of transparent conductive material deposited in the openings P of FIG. 7."

Office Action at page 3, lines 5-7 (citing col. 4, lines 28-30 of Morimoto).

However, col. 4, lines 28-30 of Morimoto pertains to the device of FIGs. 2-6 of Morimoto and never mentions the separate embodiment of FIG. 7 at all! Morimoto discloses that **FIG. 7 pertains to a completely different device than the device shown in FIGs. 2 and 6** (see col. 3, lines 3-5 and 13-17 and col. 7, lines 3-4)! **There is no indication in Morimoto that the layer 13 is even present in the device of FIG. 7 that has the openings P**!).

Simply put, there is no disclosure in Morimoto that the device of FIG. 7 even includes any conductor pattern 13.

Without the conductive pattern 13, then the only remaining conductive pattern in FIG. 7 is metal layer 12. And clearly, metal layer 12 of FIG. 7, by itself, cannot satisfy the claim limitation that (Morimoto at col. 7, lines 15-17 teaches with respect to FIG. 7 that the metal film 12 is left at only areas shown in oblique lines.").

Accordingly, the Office Action has failed to indicate how and where Morimoto allegedly discloses a single device having ALL of the following features: a **conductor pattern**, **parts of which define pixels**, wherein at least within a viewing area of the display device, the conductor pattern, viewed transversely to the substrate along a direction from the conductor pattern toward the substrate, **substantially covers the corresponding part of the first substrate**.

Accordingly, for at least this additional reason, it is respectfully submitted that the device of claim 1 is patentable over Morimoto.

Claims 3-5

Claims 3-5 depend from claim 1 and are therefore deemed patentable over Morimoto for at least the reasons set forth above with respect to claim 1, and for the following additional reasons.

Claim 3

Among other things, the display device of claim 3 includes partitioning paths having a substantially constant path width.

No such feature is disclosed in Morimoto.

Again, Morimoto itself appears to be silent about the width of the spacing between conductors, and the Examiner has merely divined that the spacing between conductors is substantially constant from nothing more than his own visual interpretation of FIG. 7. The Office Action stated that such a feature is shown in FIG. 7. Applicants respectfully disagree.

Indeed, to the extent that anything is revealed in Morimoto, FIG. 7 seems to indicate sharp corners throughout the partitioning path, instead of a curved shape which could provide a substantially constant path width. The width at these sharp corners is self-evidently greater than the width along the sides. Accordingly, apparently the partitioning paths do not have a substantially constant path width. Thus, **FIG. 7 of Morimoto appears to be contrary to the device claimed in claim 3**.

Accordingly, for at least this additional reason, it is respectfully submitted that

the device of claim 3 is patentable over Morimoto.

Claim 5

Among other things, in the display device of claim 5, at least 80% of the partitioning paths have a minimal path width.

No such feature is disclosed in Morimoto.

The Office Action stated that such a feature is shown in FIG. 7. Applicants respectfully disagree.

As noted above, Applicants have defined the term minimal path width in the specification.

Also as noted above, Morimoto is completely silent about providing a minimal path width between adjacent parts of the conductor pattern. Furthermore, it is not possible from inspection of FIG. 7 to determine that any portion of the partitioning paths have a minimal path width - and it is certainly not possible to determine that 80% have a minimal path width. Morimoto is again silent.

Also, regarding the statement in the Office Action that Applicant's disclosure teaches that minimal paths are not achieved in places where the partition paths form a corner, that is true. But that is completely different from teaching that minimal path widths are not achieved **only** in places where the partition paths form a corner. That is NOT taught by Applicant's disclosure. Applicants submit that one cannot tell from FIG. 7 that more than 80% of the partitioning paths have a straight or curved path.

Moreover, even assuming, *arguendo*, that more than 80% of the partitioning paths in FIG. 7 of Morimoto did have a straight or curved path, that would not mean

that 80% of the partitioning paths have a minimal path width.

Accordingly, for at least this additional reason, it is respectfully submitted that the device of claim 5 is patentable over Morimoto.

**Claims 1, 6-11 and 13-14 Are All Patentable over Khan et al.**

The FINAL Office Action dated 26 February 2003 rejected claims 1, 6-11 and 13-14 under 35 U.S.C. § 102 as allegedly being unpatentable over Khan et al. U.S. Patent No. 6,034,752 ("Khan").

Applicants respectfully traverse those rejections and submit that claims 1, 6-11 and 13-14 are patentable over Khan for at least the following reasons.

Claim 1

Among other things, in the display device of claim 1 includes a conductor pattern, parts of which define pixels, wherein at least within the viewing area of the display device, the conductor pattern, viewed transversely to the substrate along a direction from the conductor pattern toward the substrate, substantially covers the corresponding part of the first substrate.

No such feature is disclosed by Khan.

The Office Action states that Khan discloses a plurality of elongated electrode strips each having a width of 244 microns and a space therebetween of 15-20 microns.

However, Khan never gives any hint or suggestion at all that these elongated electrode strips extend to **substantially cover the entire viewing area** of the display

device. Khan does not indicate the extent of these elongated electrode strips in either direction (either the length or width of the device), and nothing can be discerned in this regard from FIG. 6, cited by the Examiner, which does not show an entire viewing area of the display.

Accordingly, Khan clearly does not disclose or suggest a display device having a conductor pattern, parts of which define pixels, wherein at least within a viewing area of the display device, the conductor pattern, viewed transversely to the substrate along a direction from the conductor pattern toward the substrate, substantially covers the corresponding part of the first substrate.

Furthermore, in the display device of claim 1, the parts of the conductor pattern are substantially mutually separated by partitioning paths having a minimal path width.

Khan does not disclose providing any minimal path width between adjacent parts of the conductor pattern. The Examiner has stated that the spacing between electrodes in Khan are 15-20 microns. However, Khan make no mention of minimal path widths and Applicants respectfully submit that the bare numerical values quoted by the Examiner do not disclose or suggest the specifically defined features of Applicants' claimed invention.

Accordingly, for at least these reasons, it is respectfully submitted that the device of claim 1 is patentable over Khan.

Claims 6-9

Claims 6-9 depend from claim 1 and are therefore deemed patentable over

Khan for at least the reasons set forth above with respect to claim 1, and for the following additional reasons.

Claim 9

Claim 9 includes a feature wherein a distance between adjacent parts of the conductor pattern is substantially constant. **The FINAL Office Action fails to cite anything at all in Khan as allegedly disclosing that the distance between adjacent parts of the conductor pattern is substantially constant**. Meanwhile, Applicants respectfully submit that Khan does not disclose such a feature.

Accordingly, for at least this additional reason, it is respectfully submitted that claim 9 is patentable over Khan.

Claim 10

The device of claim 10 includes a first conductor pattern on a side of the first substrate nearest the second substrate, defining pixels of the display device and, within a viewing area of the device, substantially completely covering the first substrate, and a second conductor pattern, on a side of the second substrate nearest the first substrate, that substantially completely covers the second substrate.

No device having such a combination of features is disclosed by Khan.

The Examiner states that Khan discloses a plurality of elongated electrode strips each having a width of 244 microns and a space therebetween of 15-20 microns.

However, as noted above Khan never gives any hint or suggestion at all that these elongated electrode strips extend to substantially cover any substrate. Khan

does not indicate the extent of these elongated electrode strips in either direction (either across the length or the width of the substrate) and such cannot be seen in FIG. 6.

Therefore, Khan does not disclose or suggest a display device having a first conductor pattern on a side of the first substrate nearest the second substrate, defining pixels of the display device and, within a viewing area of the device, substantially completely covering the first substrate, and a second conductor pattern, on a side of the second substrate nearest the first substrate, that substantially completely covers the second substrate.

Accordingly, for at least these reasons, it is respectfully submitted that the device of claim 10 is patentable over Khan.

Claims 11 and 13-14

Claims 11 and 13-14 depend from claim 10 and are therefore deemed patentable over Khan for at least the reasons set forth above with respect to claim 10, and for the following additional reasons.

Claim 13

Among other things, the device of claim 13 includes first and second partitioning paths, each of which has a minimal path width along at least 80% of a length thereof.

Khan does not disclose that the first and second partitioning paths having a minimal path width. As explained above, the term "minimal path width" has a specifically defined meaning in the specification and cannot be properly construed to

mean any so-called "very small" path width by resort to some external dictionary definition. Moreover, Khan is certainly silent about the first and second partitioning paths having any minimal path width along at least 80% of a length thereof.

Accordingly, for at least this additional reason, it is respectfully submitted that claim 13 is patentable over Khan.

**Claims 15-19 Are All Patentable over Young et al.**

The FINAL Office Action dated 26 February 2003 rejected claims 15-19 under 35 U.S.C. § 102(b) as allegedly being unpatentable over Young et al. U.S. Patent 6,153,254 ("Young").

Claim 15

Among other things, the device of claim 15 includes a first conductor pattern on a substrate, defining pixels of the display device, and a second conductor pattern disposed on a electroluminescent material, wherein within the viewing area of the display device, the first and second conductor patterns, viewed along a direction perpendicular to the substrate, each substantially completely cover the substrate.

No such feature is disclosed by Young.

The Examiner states that Young discloses conductor patterns 8 and 2, at least one of which, viewed in the direction of the conductor pattern 2 towards the substrate 1, substantially covers the corresponding part of the first substrate.

However, that is not what is claimed in claims 15-19. Instead, claim 15 recites

that, viewed along a direction perpendicular to the substrate, **the first and second conductor patterns each** substantially completely covers the substrate within the viewing area of the display device.

Moreover, Young never gives any hint or suggestion at all that the electrode strips 2 or 8 substantially cover a substrate within the viewing area of the display device and indeed, from inspection of FIG. 1 and 2A-B, it appears that certainly at least strips 8 do not.

Furthermore, in the display devices of claims 15-19, the first conductor pattern defines pixels of the device. Meanwhile, the Office Action fairly admits that pixels in Young are not defined by the first conductor pattern, but instead are defined by locations where the second conductor pattern 8 overlaps the first conductor pattern 2 (FINAL Office Action at page 5, lines 18-19).

Therefore, it is not possible for Young to disclose the device of claim 15.

Accordingly, for at least this reason, Applicants respectfully submit that the device of claim 15 is patentable over Young.

Claims 16-19

Claims 16-19 depend from claim 15 and are therefore deemed patentable over Young for at least the reasons set forth above with respect to claim 15, and for the following additional reasons.

Claims 16 and 19

Among other things, the devices of claims 16 and 19 each include first and second partitioning paths, each of which has a minimal path width along at least

80% of a length thereof.

Young is completely silent about any first or second partitioning paths having any minimal path width. As explained above, the term "minimal path width" has a specifically defined meaning in the specification and cannot be properly construed to mean any so-called "very small" path width by resort to some external dictionary definition. Moreover, Young is certainly silent about the first and second partitioning paths having any minimal path width along at least 80% of a length thereof.

Accordingly, for at least this additional reason, it is respectfully submitted that claims 16 and 19 are patentable over Young.

**Claim 12 Is Patentable Over Khan in View of Young**

The FINAL Office Action dated 26 February 2003 rejected claim 12 under 35 U.S.C. § 102 as allegedly being unpatentable over Khan in view of Young.

Among other things, in the display device of claim 12 the first and second partitioning paths are substantially aligned.

No such feature is disclosed by Khan, Young, or any combination thereof.

The Office Action fairly admits that such a feature is not disclosed in Khan.

However, the Office Action states that: (1) "it is well known in the art" to have electrodes strip aligned **with** the viewing area of the display device as evidenced by Young; and (2) therefore partitioning paths separating rows and columns will also be aligned with viewing area.

At the outset, claim 12 actually recites that the first and second partitioning paths are substantially aligned, **within** the viewing area of the display device. Meanwhile, the Office Action discusses whether the "portioning paths" in the proposed combination of Khan and Young would be aligned **with** the viewing area. Once again, **this is not what Applicants have claimed**.

Applicants do not see any assertion in the Office Action that any combination of Khan and Young would produce any device where the first and second partitioning paths are substantially aligned. Moreover, as can be clearly seen in FIG. 1, the first and second partitioning paths in Young are clearly not aligned. That is, the partitioning paths between the electrode strips 8 extend in a vertical direction, while the partitioning paths between the electrode strips 2 extend in a horizontal direction.

So, in direct contrast to the feature of claim 12 where the first and second partitioning paths being aligned, in Young the first and second partitioning paths project perpendicularly onto each other!

Therefore, no possible combination of Khan and Young could produce the device of claim 12.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 12 is patentable over any combination of Khan and Young.

## Conclusion

For all of the foregoing reasons, Applicants respectfully submit that claims 1 and 3-19 are each patentable over the cited prior art. Therefore, Applicants respectfully request that claims 1 and 3-19 be allowed and the application be passed to issue.

Respectfully submitted,

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Date: 14 July 2003

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## Appendix - Claims on Appeal

1. A display device comprising a first substrate with a conductor pattern, parts of which define pixels, wherein at least within a viewing area of the display device, the conductor pattern, viewed transversely to the substrate along a direction from the conductor pattern toward the substrate, substantially covers the corresponding part of the first substrate, and wherein the parts of the conductor pattern are substantially mutually separated by partitioning paths having a minimal path width.

3. A display device as claimed in claim 1, characterized in that the partitioning paths have a substantially constant width.

4. A display device as claimed in claim 2 or 3, characterized in that the partitioning paths at least locally have a curved course.

5. A display device as claimed in claim 2 or 3, characterized in that at least 80% of the partitioning paths has a minimal path width.

6. A display device as claimed in claim 1, characterized in that it comprises a light-emitting material between two conductor patterns, at least one of which, viewed transversely to the substrate, substantially completely covers the corresponding part of the first substrate.

7. A display device as claimed in claim 1, further comprising a second substrate and a layer of electro-optical material between two conductor patterns on the first and second substrates, at least one of which conductor patterns, viewed transversely to the corresponding substrate along a direction from the one conductor pattern toward the corresponding substrate, substantially covers the corresponding substrate.

8. The display device of claim 1, wherein the conductor pattern is transparent.

9. The display device of claim 1, wherein a distance between adjacent parts of the conductor pattern is substantially constant.

10. A display device comprising:

first and second substrates separated and confronting each other,

a first conductor pattern on a side of the first substrate nearest the second substrate, the first conductor pattern defining pixels of the display device, and

a second conductor pattern on a side of the second substrate nearest the first substrate,

wherein, within a viewing area of the device, the first conductor pattern

substantially completely covers the first substrate, and

wherein, within the viewing area of the display device, the second conductor pattern substantially completely covers the second substrate.

11. The display device of claim 10, wherein the first conductor pattern comprises a plurality of first electrodes separated from each other by a first partitioning path, and wherein the second conductor pattern comprises a plurality of second electrodes separated from each other by a second partitioning path.

12. The display device of claim 11, wherein the first and second partitioning paths, viewed along a direction perpendicular to the substrate, are substantially aligned within the viewing area of the display device.

13. The display device of claim 11, wherein each of the first and second partitioning paths has a minimal path width along at least 80% of a length thereof.

14. The display device of claim 10, further comprising an electro-optical material disposed between the first and second substrates.

15. A display device, comprising:

a substrate;

a first conductor pattern disposed on the substrate, the first conductor pattern defining pixels of the display device;

an electroluminescent material disposed on the first conductor pattern;

a second conductor pattern disposed on the electroluminescent material,

wherein within the viewing area of the display device, the first and second conductor patterns, viewed along a direction perpendicular to the substrate, each substantially completely cover the substrate.

16. The display device of claim 15, wherein the first conductor pattern comprises a plurality of first electrodes separated from each other by a first partitioning path, and wherein the first partitioning path has a minimal path width along at least 80% of a length thereof.

17. The display device of claim 16, wherein the partitioning path is at least partially filled with an insulating material.

18. The display device of claim 16, wherein the second conductor pattern comprises a plurality of sub-electrodes.

19. The display device of claim 18, wherein the plurality of second electrodes are separated from each other by a second partitioning path, and wherein the second partitioning path has a minimal path width along at least 80% of a length thereof.